



SEQUENCE LISTING

<110> GOTO, Masaaki  
TSUDA, Eisuke  
MOCHIZUKI, Shin'ichi  
YANO, Kazuki  
KOBAYASHI, Fumie  
SHIMA, Nobuyuki  
YASUDA, Hisataka  
NAKAGAWA, Nobuaki  
MORINAGA, Tomonori  
UEDA, Masatsugu  
HIGASHIO, Kanji

<120> Novel Proteins and Methods for Producing the Proteins

<130> 16991.010

<140> US 08/915,004

<141> 1997-08-20

<150> PCT/JP96/00374

<151> 1996-02-20

<150> JP 207508/1995

<151> 1995-07-21

<150> JP 054977/1995

<151> 1995-02-20

<160> 108

<170> PatentIn version 3.1

<210> 1

<211> 6

<212> PRT

<213> Homo sapiens

<220>

<221> MISC\_FEATURE

<222> (1)..(1)

<223> X = unknown

<400> 1

Xaa Tyr His Phe Pro Lys  
1 5

<210> 2

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> X = unknown

<220>  
<221> MISC\_FEATURE  
<222> (5)..(5)  
<223> X = unknown

<220>  
<221> MISC\_FEATURE  
<222> (13)..(13)  
<223> X = unknown

<400> 2

Xaa	Gln	His	Ser	Xaa	Gln	Glu	Gln	Thr	Phe	Gln	Leu	Xaa	Lys
1				5					10				

<210> 3  
<211> 12  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MISC\_FEATURE  
<222> (1)..(1)  
<223> X = unknown

<400> 3

Xaa	Ile	Arg	Phe	Leu	His	Ser	Phe	Thr	Met	Tyr	Lys
1				5					10		

<210> 4  
<211> 380  
<212> PRT  
<213> Homo sapiens

<400> 4

Glu	Thr	Phe	Pro	Pro	Lys	Tyr	Leu	His	Tyr	Asp	Glu	Glu	Thr	Ser	His
1				5					10					15	

Gln	Leu	Leu	Cys	Asp	Lys	Cys	Pro	Pro	Gly	Thr	Tyr	Leu	Lys	Gln	His
			20					25					30		

Cys	Thr	Ala	Lys	Trp	Lys	Thr	Val	Cys	Ala	Pro	Cys	Pro	Asp	His	Tyr
		35					40					45			

Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys Leu Tyr Cys Ser Pro  
50 55 60

Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu Cys Asn Arg Thr His  
65 70 75 80

Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr Leu Glu Ile Glu Phe  
85 90 95

Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe Gly Val Val Gln Ala  
100 105 110

Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg Cys Pro Asp Gly Phe  
115 120 125

Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn  
130 135 140

Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys Gly Asn Ala Thr His  
145 150 155 160

Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile  
165 170 175

Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr  
180 185 190

Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly  
195 200 205

Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile Lys Arg Gln His Ser  
210 215 220

Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu Trp Lys His Gln Asn  
225 230 235 240

Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln Asp Ile Asp Leu Cys  
245 250 255

Glu Asn Ser Val Gln Arg His Ile Gly His Ala Asn Leu Thr Phe Glu  
260 265 270

Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly Lys Lys Val Gly Ala  
 275 280 285

Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile  
 290 295 300

Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr  
 305 310 315 320

Leu Lys Gly Leu Met His Ala Leu Lys His Ser Lys Thr Tyr His Phe  
 325 330 335

Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His  
 340 345 350

Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile  
 355 360 365

Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys Leu  
 370 375 380

<210> 5  
 <211> 401  
 <212> PRT  
 <213> Homo sapiens

<400> 5

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu

85

90

95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys  
385 390 395 400

Leu

<210> 6  
<211> 1206  
<212> DNA  
<213> Homo sapiens

<400> 6  
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
caggaaacgt ttccctccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
tgtgacaaat gtccctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt 240  
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc 300  
cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa 360  
cataggagct gccctcctgg atttgagtg gtgcaagctg gaaccccaga gcgaaatata 420  
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt 480  
agaaaacaca caaattgcag tgtctttggc ctctgctaa ctcagaaagg aaatgcaaca 540  
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc 600  
ctgtgtgagg aggcatctt caggtttgct gttcctacaa agtttacgcc taactggctt 660  
agtgtcttgg tagacaattt gcctggcacc aaagtaaagc cagagagtgt agagaggata 720  
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa 780

aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcatgcaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttccttcaca gcttcacaat gtacaaattg	1140
tatcagaagt tattttttaga aatgataggt aaccagggtcc aatcagtaaa aataagctgc	1200
ttataa	1206

<210> 7  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 7

Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp Glu Glu Thr Ser
1                      5                                      10                                      15

<210> 8  
 <211> 1185  
 <212> DNA  
 <213> Homo sapiens

<400> 8	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtctctctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggacacaccag tgacgagtgt	240
ctataactgca gccccgtgtg caaggagtgc aatcgacccc acaaccgcgt gtgcgaatgc	300
aaggaagggc gctaccttga gatagagttc tgcttgaaac ataggagctg cctcctgga	360
tttgagagtgg tgcaagctgg aaccccagag cgaaatacag tttgcaaaag atgtccagat	420
gggttcttct caaatgagac gtcattctaaa gcaccctgta gaaaacacac aaattgcagt	480
gtctttggtc tcttgctaac tcagaaagga aatgcaacac acgacaacat atgttccgga	540
aacagtgaat caactcaaaa atgtggaata gatgttacct tgtgtgagga ggcatctctc	600
aggtttgctg ttctacaaa gtttacgcct aactggctta gtgtcttggt agacaatttg	660

cctggcacca aagtaaacgc agagagtgtg gagaggataa aacggcaaca cagctcacia 720  
 gaacagactt tccagctgct gaagttatgg aaacatcaaa acaaagacca agatatagtc 780  
 aagaagatca tccaagatat tgacctctgt gaaaacagcg tgcagcggca cattggacat 840  
 gctaacctca cctfcgagca gcttcgtagc ttgatggaaa gcttaccggg aaagaaagtg 900  
 ggagcagaag acattgaaaa aacaataaag gcatgcaaac ccagtgacca gatcctgaag 960  
 ctgctcagtt tgtggcgaat aaaaaatggc gaccaagaca ccttgaaggg cctaatagcac 1020  
 gcactaaagc actcaaagac gtaccacttt cccaaaactg tcactcagag tctaaagaag 1080  
 accatcaggt tccttcacag cttcacaatg taaaaattgt atcagaagtt atttttagaa 1140  
 atgataggta accaggtcca atcagtaaaa ataagctgct tataa 1185

<210> 9  
 <211> 394  
 <212> PRT  
 <213> Homo sapiens

<400> 9

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Cys Asn Arg Thr His Asn Arg  
 85 90 95

Val Cys Glu Cys Lys Glu Gly Arg Tyr Leu Glu Ile Glu Phe Cys Leu  
 100 105 110

Lys His Arg Ser Cys Pro Pro Gly Phe Gly Val Val Gln Ala Gly Thr  
 115 120 125



Pro Glu Arg Asn Thr Val Cys Lys Arg Cys Pro Asp Gly Phe Phe Ser  
 130 135 140

Asn Glu Thr Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn Cys Ser  
 145 150 155 160

Val Phe Gly Leu Leu Leu Thr Gln Lys Gly Asn Ala Thr His Asp Asn  
 165 170 175

Ile Cys Ser Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile Asp Val  
 180 185 190

Thr Leu Cys Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr Lys Phe  
 195 200 205

Thr Pro Asn Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly Thr Lys  
 210 215 220

Val Asn Ala Glu Ser Val Glu Arg Ile Lys Arg Gln His Ser Ser Gln  
 225 230 235 240

Glu Gln Thr Phe Gln Leu Leu Lys Leu Trp Lys His Gln Asn Lys Asp  
 245 250 255

Gln Asp Ile Val Lys Lys Ile Ile Gln Asp Ile Asp Leu Cys Glu Asn  
 260 265 270

Ser Val Gln Arg His Ile Gly His Ala Asn Leu Thr Phe Glu Gln Leu  
 275 280 285

Arg Ser Leu Met Glu Ser Leu Pro Gly Lys Lys Val Gly Ala Glu Asp  
 290 295 300

Ile Glu Lys Thr Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile Leu Lys  
 305 310 315 320

Leu Leu Ser Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys  
 325 330 335

Gly Leu Met His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys  
 340 345 350

Thr Val Thr Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe  
 355 360 365

Thr Met Tyr Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn  
 370 375 380

Gln Val Gln Ser Val Lys Ile Ser Cys Leu  
 385 390

<210> 10  
 <211> 1089  
 <212> DNA  
 <213> Homo sapiens

<400> 10  
 atgaacaagt tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccctga ccactactac acagacagct ggacacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctcctgg atttgagtg gtgcaagctg gaaccccaga gcgaaataca 420  
 gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcaccctgt 480  
 agaaaacaca caaattgcag tgtcttttgt ctctgctaa ctcagaaagg aaatgcaaca 540  
 cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc 600  
 ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt 660  
 agtgtcttgg tagacaattt gcctggcacc aaagtaaacy cagagagtgt agagaggata 720  
 aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa 780  
 aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc 840  
 gtgcagcggc acattggaca tgctaacctc agtttgtggc gaataaaaaa tggcgaccaa 900  
 gacaccttga agggccta at gcacgcacta aagcactcaa agacgtacca ctttcccaaa 960  
 actgtcactc agagtctaaa gaagaccatc aggttccttc acagcttcac aatgtacaaa 1020  
 ttgtatcaga agttatTTTT agaaatgata ggtaaccagg tccaatcagt aaaaataagc 1080  
 tgcttataa 1089

<210> 11  
 <211> 362  
 <212> PRT  
 <213> Homo sapiens

<400> 11

Met Asn Lys Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Ser Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys  
 290 295 300

Gly Leu Met His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys  
 305 310 315 320

Thr Val Thr Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe  
 325 330 335

Thr Met Tyr Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn  
 340 345 350

Gln Val Gln Ser Val Lys Ile Ser Cys Leu  
 355 360

<210> 12  
 <211> 465  
 <212> DNA  
 <213> Homo sapiens

<400> 12  
 atgaacaagt tgctgtgctg ctcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtctctctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccctga ccactactac acagacagct ggacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgacc 300

cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa 360  
cataggagct gccctcctgg atttgagtg gtgcaagctg gtacgtgtca atgtgcagca 420  
aaattaatta ggatcatgca aagtcagata gttgtgacag tttag 465

<210> 13  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 13

Met Asn Lys Leu Leu Cys Cys Ser Leu Val Phe Leu Asp Ile Ser Ile  
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
115 120 125

Gly Val Val Gln Ala Gly Thr Cys Gln Cys Ala Ala Lys Leu Ile Arg  
130 135 140

Ile Met Gln Ser Gln Ile Val Val Thr Val  
145 150

<210> 14  
<211> 438

<212> DNA  
 <213> Homo sapiens

<400> 14  
 atgaacaagt tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcctccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgcctga ccactactac acagacagct ggcacaccag tgacgagtgt 240  
 ctatactgca gcccctgtgt caaggagctg cagtacgtca agcaggagtg caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctcctgg atttggagtgt gtgcaagctg gatgcaggag aagacccaag 420  
 ccacagatat gtatctga 438

<210> 15  
 <211> 145  
 <212> PRT  
 <213> Homo sapiens

<400> 15  
 Met Asn Lys Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15  
 Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30  
 Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45  
 Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60  
 Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80  
 Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95  
 Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110  
 Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe

115

120

125

Gly Val Val Gln Ala Gly Cys Arg Arg Arg Pro Lys Pro Gln Ile Cys  
 130 135 140

Ile  
 145

<210> 16  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 16  
 aattaaccct cactaaaggg 20

<210> 17  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 17  
 gtaatacgac tcactatagg gc 22

<210> 18  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 18  
 acatcaaaac aaagaccaag 20

<210> 19  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 19  
 tcttggtctt tgttttgatg 20

<210> 20  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Sequence

<400> 20  
ttattcgcca caaactgagc 20

<210> 21  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Sequence

<400> 21  
ttgtgaagct gtgaaggaac 20

<210> 22  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Sequence

<400> 22  
gctcagtttg tggcgaataa 20

<210> 23  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Sequence

<400> 23  
gtgggagcag aagacattga 20

<210> 24  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Sequence



<400> 24	
aatgaacaac ttgctgtgct	20
<210> 25	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 25	
tgacaaatgt cctcctggta	20
<210> 26	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 26	
aggtaggtac caggaggaca	20
<210> 27	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 27	
gagctgccct cctggatttg	20
<210> 28	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Synthetic Sequence	
<400> 28	
caaactgtat ttcgctctgg	20
<210> 29	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

<220>  
 <223> Synthetic Sequence  
  
 <400> 29  
 gtgtgaggag gcattcttca 20  
  
 <210> 30  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 30  
 gaatcaactc aaaaaagtgg aatagatggt ac 32  
  
 <210> 31  
 <211> 32  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 31  
 gtaacatcta ttccactttt ttgagttgat tc 32  
  
 <210> 32  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 32  
 atagatgtta ccctgagtga ggaggcattc 30  
  
 <210> 33  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 33  
 gaatgcctcc tcactcaggg taacatctat 30  
  
 <210> 34

<211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 34  
 caagatattg acctcagtga aaacagcgtg c 31  
  
 <210> 35  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 35  
 gcacgctggtt ttcactgagg gcaatatctt g 31  
  
 <210> 36  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 36  
 aaaacaataa aggcaagcaa acccagtgac c 31  
  
 <210> 37  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 37  
 ggtcactggg tttgcttgcc tttattgttt t 31  
  
 <210> 38  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 38  
 tcagtaaaaa taagcagctt ataactggcc a 31

<210> 39  
 <211> 31  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 39  
 tggccagtta taagctgctt atttttactg a 31  
  
 <210> 40  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 40  
 ttgggggttta ttggaggaga tg 22  
  
 <210> 41  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 41  
 accacccagg aaccttgccc tgaccactac tacaca 36  
  
 <210> 42  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 42  
 gtcagggcaa ggttcctggg tggtcactt aatgga 36  
  
 <210> 43  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence

<400> 43  
 accgtgtgcg ccgaatgcaa ggaagggcgc tacctt 36

<210> 44  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 44  
 ttccttgcat tcggcgcaca cggctctcca ctttgc 36

<210> 45  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 45  
 aaccgctgtg gcagatgtcc agatgggttc ttctca 36

<210> 46  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 46  
 atctggacat ctgcacacgc ggttgtgggt gcgatt 36

<210> 47  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 47  
 acagtttgca aatccgaaa cagtgaatca actcaa 36

<210> 48  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 48  
 actgtttccg gatttgcaaa ctgtatttcg ctctgg 36

<210> 49  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 49  
 aatgtggaat agatattgac ctctgtgaaa acagcg 36

<210> 50  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 50  
 agaggtcaat atctattcca catttttgag ttgatt 36

<210> 51  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 51  
 agatcatcca agacgcacta aagcactcaa agacgt 36

<210> 52  
 <211> 36  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic Sequence

<400> 52  
 gcttttagtgc gtcttgatg atcttcttga ctatat 36

<210> 53

<211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 53  
 ggctcgagcg cccagccgcc gcctccaag 29  
  
 <210> 54  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 54  
 tttgagtgtt ttagtgctg 20  
  
 <210> 55  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 55  
 tcagtaaaaa taagctaact ggaaatggcc 30  
  
 <210> 56  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 56  
 ggccatttcc agttagctta tttttactga 30  
  
 <210> 57  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 57  
 ccggatcctc agtgctttag tgcgtgcat 29

<210> 58  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 58  
 ccggatcctc attggatgat cttcttgac 29  
  
 <210> 59  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 59  
 ccggatcctc atattccaca tttttgagt 29  
  
 <210> 60  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 60  
 ccggatcctc atttgcaaac tgtatttcg 29  
  
 <210> 61  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic Sequence  
  
 <400> 61  
 ccggatcctc attcgcacac gcggttggtg 29  
  
 <210> 62  
 <211> 401  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 62



Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15  
 Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30  
 Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45  
 Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60  
 Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80  
 Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95  
 Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110  
 Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125  
 Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140  
 Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160  
 Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175  
 Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190  
 Gln Lys Ser Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205  
 Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220  
 Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile

225		230		235		240
Lys Arg Gln His	Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu	Lys Leu				
	245		250		255	
Trp Lys His	Gln Asn Lys Asp Gln Asp Ile Val Lys Lys	Ile Ile Gln				
	260		265		270	
Asp Ile Asp	Leu Cys Glu Asn Ser Val Gln Arg His	Ile Gly His Ala				
	275		280		285	
Asn Leu Thr Phe Glu	Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly					
	290		295		300	
Lys Lys Val Gly Ala	Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys					
305		310		315		320
Pro Ser Asp Gln Ile	Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn					
	325		330		335	
Gly Asp Gln Asp Thr	Leu Lys Gly Leu Met His Ala Leu Lys His Ser					
	340		345		350	
Lys Thr Tyr His Phe	Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr					
	355		360		365	
Ile Arg Phe Leu His	Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu					
	370		375		380	
Phe Leu Glu Met Ile	Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys					
385		390		395		400

Leu

<210> 63  
 <211> 401  
 <212> PRT  
 <213> Homo sapiens

<400> 63

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Ser Glu Glu Ala Phe Phe Arg  
195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys  
385 390 395 400

Leu

<210> 64  
<211> 401  
<212> PRT  
<213> Homo sapiens

<400> 64

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Ser Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
 325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
 340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
 355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
 370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys  
 385 390 395 400

Leu

<210> 65  
 <211> 401  
 <212> PRT  
 <213> Homo sapiens

<400> 65

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr

35

40

45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Ser Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
 325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
 340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
 355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
 370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser Cys  
 385 390 395 400

Leu

<210> 66  
 <211> 401  
 <212> PRT  
 <213> Homo sapiens

<400> 66

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45



Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala

275

280

285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
 325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
 340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
 355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
 370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser Ser  
 385 390 395 400

Leu

<210> 67

<211> 360

<212> PRT

<213> Homo sapiens

<400> 67

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Pro Cys Pro Asp His Tyr Tyr Thr Asp Ser  
 20 25 30

Trp His Thr Ser Asp Glu Cys Leu Tyr Cys Ser Pro Val Cys Lys Glu  
 35 40 45

Leu Gln Tyr Val Lys Gln Glu Cys Asn Arg Thr His Asn Arg Val Cys  
 50 55 60

Glu	Cys	Lys	Glu	Gly	Arg	Tyr	Leu	Glu	Ile	Glu	Phe	Cys	Leu	Lys	His	65	70	75	80
Arg	Ser	Cys	Pro	Pro	Gly	Phe	Gly	Val	Val	Gln	Ala	Gly	Thr	Pro	Glu	85	90	95	
Arg	Asn	Thr	Val	Cys	Lys	Arg	Cys	Pro	Asp	Gly	Phe	Phe	Ser	Asn	Glu	100	105	110	
Thr	Ser	Ser	Lys	Ala	Pro	Cys	Arg	Lys	His	Thr	Asn	Cys	Ser	Val	Phe	115	120	125	
Gly	Leu	Leu	Leu	Thr	Gln	Lys	Gly	Asn	Ala	Thr	His	Asp	Asn	Ile	Cys	130	135	140	
Ser	Gly	Asn	Ser	Glu	Ser	Thr	Gln	Lys	Cys	Gly	Ile	Asp	Val	Thr	Leu	145	150	155	160
Cys	Glu	Glu	Ala	Phe	Phe	Arg	Phe	Ala	Val	Pro	Thr	Lys	Phe	Thr	Pro	165	170	175	
Asn	Trp	Leu	Ser	Val	Leu	Val	Asp	Asn	Leu	Pro	Gly	Thr	Lys	Val	Asn	180	185	190	
Ala	Glu	Ser	Val	Glu	Arg	Ile	Lys	Arg	Gln	His	Ser	Ser	Gln	Glu	Gln	195	200	205	
Thr	Phe	Gln	Leu	Leu	Lys	Leu	Trp	Lys	His	Gln	Asn	Lys	Asp	Gln	Asp	210	215	220	
Ile	Val	Lys	Lys	Ile	Ile	Gln	Asp	Ile	Asp	Leu	Cys	Glu	Asn	Ser	Val	225	230	235	240
Gln	Arg	His	Ile	Gly	His	Ala	Asn	Leu	Thr	Phe	Glu	Gln	Leu	Arg	Ser	245	250	255	
Leu	Met	Glu	Ser	Leu	Pro	Gly	Lys	Lys	Val	Gly	Ala	Glu	Asp	Ile	Glu	260	265	270	
Lys	Thr	Ile	Lys	Ala	Cys	Lys	Pro	Ser	Asp	Gln	Ile	Leu	Lys	Leu	Leu	275	280	285	

Ser Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys Gly Leu  
 290 295 300

Met His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys Thr Val  
 305 310 315 320

Thr Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe Thr Met  
 325 330 335

Tyr Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn Gln Val  
 340 345 350

Gln Ser Val Lys Ile Ser Cys Leu  
 355 360

<210> 68  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 68

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Glu  
 50 55 60

Cys Lys Glu Gly Arg Tyr Leu Glu Ile Glu Phe Cys Leu Lys His Arg  
 65 70 75 80

Ser Cys Pro Pro Gly Phe Gly Val Val Gln Ala Gly Thr Pro Glu Arg  
 85 90 95

Asn Thr Val Cys Lys Arg Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr  
 100 105 110

Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn Cys Ser Val Phe Gly  
 115 120 125

Leu Leu Leu Thr Gln Lys Gly Asn Ala Thr His Asp Asn Ile Cys Ser  
 130 135 140

Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile Asp Val Thr Leu Cys  
 145 150 155 160

Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr Lys Phe Thr Pro Asn  
 165 170 175

Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly Thr Lys Val Asn Ala  
 180 185 190

Glu Ser Val Glu Arg Ile Lys Arg Gln His Ser Ser Gln Glu Gln Thr  
 195 200 205

Phe Gln Leu Leu Lys Leu Trp Lys His Gln Asn Lys Asp Gln Asp Ile  
 210 215 220

Val Lys Lys Ile Ile Gln Asp Ile Asp Leu Cys Glu Asn Ser Val Gln  
 225 230 235 240

Arg His Ile Gly His Ala Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu  
 245 250 255

Met Glu Ser Leu Pro Gly Lys Lys Val Gly Ala Glu Asp Ile Glu Lys  
 260 265 270

Thr Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser  
 275 280 285

Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys Gly Leu Met  
 290 295 300

His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys Thr Val Thr  
 305 310 315 320

Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe Thr Met Tyr  
 325 330 335

Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn Gln Val Gln  
 340 345 350

Ser Val Lys Ile Ser Cys Leu  
355

<210> 69  
<211> 363  
<212> PRT  
<213> Homo sapiens

<400> 69

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Arg Cys Pro Asp Gly Phe Phe  
100 105 110

Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn Cys  
115 120 125

Ser Val Phe Gly Leu Leu Leu Thr Gln Lys Gly Asn Ala Thr His Asp  
130 135 140

Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile Asp  
145 150 155 160

Val Thr Leu Cys Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr Lys  
165 170 175

Phe Thr Pro Asn Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly Thr

180	185	190
Lys Val Asn Ala Glu Ser Val	Glu Arg Ile Lys Arg	Gln His Ser Ser
195	200	205
Gln Glu Gln Thr Phe Gln	Leu Leu Lys Leu Trp	Lys His Gln Asn Lys
210	215	220
Asp Gln Asp Ile Val	Lys Lys Ile Ile Gln	Asp Ile Asp Leu Cys Glu
225	230	235 240
Asn Ser Val Gln Arg His Ile	Gly His Ala Asn Leu Thr	Phe Glu Gln
245	250	255
Leu Arg Ser Leu Met Glu Ser	Leu Pro Gly Lys Lys Val	Gly Ala Glu
260	265	270
Asp Ile Glu Lys Thr Ile	Lys Ala Cys Lys Pro Ser	Asp Gln Ile Leu
275	280	285
Lys Leu Leu Ser Leu Trp	Arg Ile Lys Asn Gly	Asp Gln Asp Thr Leu
290	295	300
Lys Gly Leu Met His Ala Leu	Lys His Ser Lys Thr Tyr His Phe Pro	
305	310	315 320
Lys Thr Val Thr Gln Ser Leu	Lys Lys Thr Ile Arg Phe Leu His Ser	
325	330	335
Phe Thr Met Tyr Lys Leu Tyr	Gln Lys Leu Phe Leu Glu Met Ile Gly	
340	345	350
Asn Gln Val Gln Ser Val Lys	Ile Ser Cys Leu	
355	360	

<210> 70  
 <211> 359  
 <212> PRT  
 <213> Homo sapiens

<400> 70

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Ser  
 130 135 140

Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile Asp Val Thr Leu Cys  
 145 150 155 160

Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr Lys Phe Thr Pro Asn  
 165 170 175

Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly Thr Lys Val Asn Ala  
 180 185 190

Glu Ser Val Glu Arg Ile Lys Arg Gln His Ser Ser Gln Glu Gln Thr  
 195 200 205

Phe Gln Leu Leu Lys Leu Trp Lys His Gln Asn Lys Asp Gln Asp Ile  
 210 215 220

Val Lys Lys Ile Ile Gln Asp Ile Asp Leu Cys Glu Asn Ser Val Gln  
 225 230 235 240



Arg His Ile Gly His Ala Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu  
245 250 255

Met Glu Ser Leu Pro Gly Lys Lys Val Gly Ala Glu Asp Ile Glu Lys  
260 265 270

Thr Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser  
275 280 285

Leu Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys Gly Leu Met  
290 295 300

His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys Thr Val Thr  
305 310 315 320

Gln Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe Thr Met Tyr  
325 330 335

Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn Gln Val Gln  
340 345 350

Ser Val Lys Ile Ser Cys Leu  
355

<210> 71  
<211> 326  
<212> PRT  
<213> Homo sapiens

<400> 71

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg  
 195 200 205

His Ile Gly His Ala Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met  
 210 215 220

Glu Ser Leu Pro Gly Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr  
 225 230 235 240

Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu  
 245 250 255

Trp Arg Ile Lys Asn Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His  
 260 265 270

Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln  
 275 280 285

Ser Leu Lys Lys Thr Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys  
 290 295 300

Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser  
 305 310 315 320

Val Lys Ile Ser Cys Leu  
 325

<210> 72  
 <211> 327  
 <212> PRT  
 <213> Homo sapiens

<400> 72

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys



Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
 195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
 210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
 325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His Ser  
 340 345 350

Lys Thr Tyr His Phe Pro Lys Thr Val Thr Gln Ser Leu Lys Lys Thr  
 355 360 365

Ile Arg Phe Leu His Ser Phe Thr Met Tyr Lys Leu Tyr Gln Lys Leu  
 370 375 380

Phe Leu Glu Met Ile Gly Asn Gln Val Gln Ser Val Lys Ile Ser  
 385 390 395

<210> 74  
 <211> 351  
 <212> PRT  
 <213> Homo sapiens

<400> 74

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg  
195 200 205

Phe Ala Val Pro Thr Lys Phe Thr Pro Asn Trp Leu Ser Val Leu Val  
210 215 220

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Cys Lys  
 305 310 315 320

Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser Leu Trp Arg Ile Lys Asn  
 325 330 335

Gly Asp Gln Asp Thr Leu Lys Gly Leu Met His Ala Leu Lys His  
 340 345 350

<210> 75  
 <211> 272  
 <212> PRT  
 <213> Homo sapiens

<400> 75

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg



130		135		140											
Cys	Pro	Asp	Gly	Phe	Phe	Ser	Asn	Glu	Thr	Ser	Ser	Lys	Ala	Pro	Cys
145					150					155					160
Arg	Lys	His	Thr	Asn	Cys	Ser	Val	Phe	Gly	Leu	Leu	Leu	Thr	Gln	Lys
				165					170					175	
Gly	Asn	Ala	Thr	His	Asp	Asn	Ile	Cys	Ser	Gly	Asn	Ser	Glu	Ser	Thr
			180					185					190		
Gln	Lys	Cys	Gly	Ile	Asp	Val	Thr	Leu	Cys	Glu	Glu	Ala	Phe	Phe	Arg
	195						200					205			
Phe	Ala	Val	Pro	Thr	Lys	Phe	Thr	Pro	Asn	Trp	Leu	Ser	Val	Leu	Val
	210					215					220				
Asp	Asn	Leu	Pro	Gly	Thr	Lys	Val	Asn	Ala	Glu	Ser	Val	Glu	Arg	Ile
225					230					235					240
Lys	Arg	Gln	His	Ser	Ser	Gln	Glu	Gln	Thr	Phe	Gln	Leu	Leu	Lys	Leu
				245					250					255	
Trp	Lys	His	Gln	Asn	Lys	Asp	Gln	Asp	Ile	Val	Lys	Lys	Ile	Ile	Gln
			260					265					270		
<210> 76															
<211> 197															
<212> PRT															
<213> Homo sapiens															
<400> 76															
Met	Asn	Asn	Leu	Leu	Cys	Cys	Ala	Leu	Val	Phe	Leu	Asp	Ile	Ser	Ile
1			5					10						15	
Lys	Trp	Thr	Thr	Gln	Glu	Thr	Phe	Pro	Pro	Lys	Tyr	Leu	His	Tyr	Asp
			20					25					30		
Glu	Glu	Thr	Ser	His	Gln	Leu	Leu	Cys	Asp	Lys	Cys	Pro	Pro	Gly	Thr
		35					40					45			
Tyr	Leu	Lys	Gln	His	Cys	Thr	Ala	Lys	Trp	Lys	Thr	Val	Cys	Ala	Pro
50						55					60				

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
180 185 190

Gln Lys Cys Gly Ile  
195

<210> 77  
<211> 143  
<212> PRT  
<213> Homo sapiens

<400> 77

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro

50                      55                      60  
 Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65                      70                      75                      80  
 Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
                     85                      90                      95  
 Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
                     100                      105                      110  
 Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
                     115                      120                      125  
 Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys  
                     130                      135                      140  
 <210> 78  
 <211> 106  
 <212> PRT  
 <213> Homo sapiens  
 <400> 78  
 Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1                      5                      10                      15  
 Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
                     20                      25                      30  
 Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
                     35                      40                      45  
 Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
                     50                      55                      60  
 Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65                      70                      75                      80  
 Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
                     85                      90                      95  
 Cys Asn Arg Thr His Asn Arg Val Cys Glu  
                     100                      105

<210> 79  
 <211> 393  
 <212> PRT  
 <213> Homo sapiens

<400> 79

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly Asn Ser Glu Ser Thr  
 180 185 190

Gln Lys Cys Gly Ile Asp Val Thr Leu Cys Glu Glu Ala Phe Phe Arg

195					200					205					
Phe	Ala	Val	Pro	Thr	Lys	Phe	Thr	Pro	Asn	Trp	Leu	Ser	Val	Leu	Val
210						215					220				
Asp	Asn	Leu	Pro	Gly	Thr	Lys	Val	Asn	Ala	Glu	Ser	Val	Glu	Arg	Ile
225					230					235					240
Lys	Arg	Gln	His	Ser	Ser	Gln	Glu	Gln	Thr	Phe	Gln	Leu	Leu	Lys	Leu
				245					250					255	
Trp	Lys	His	Gln	Asn	Lys	Asp	Gln	Asp	Ile	Val	Lys	Lys	Ile	Ile	Gln
			260					265					270		
Asp	Ile	Asp	Leu	Cys	Glu	Asn	Ser	Val	Gln	Arg	His	Ile	Gly	His	Ala
		275					280					285			
Asn	Leu	Thr	Phe	Glu	Gln	Leu	Arg	Ser	Leu	Met	Glu	Ser	Leu	Pro	Gly
	290					295					300				
Lys	Lys	Val	Gly	Ala	Glu	Asp	Ile	Glu	Lys	Thr	Ile	Lys	Ala	Cys	Lys
305					310					315					320
Pro	Ser	Asp	Gln	Ile	Leu	Lys	Leu	Leu	Ser	Leu	Trp	Arg	Ile	Lys	Asn
				325					330					335	
Gly	Asp	Gln	Asp	Thr	Leu	Lys	Gly	Leu	Met	His	Ala	Leu	Lys	His	Ser
			340					345					350		
Lys	Thr	Tyr	His	Phe	Pro	Lys	Thr	Val	Thr	Gln	Ser	Leu	Lys	Lys	Thr
		355						360					365		
Ile	Arg	Phe	Leu	His	Ser	Phe	Thr	Met	Tyr	Lys	Leu	Tyr	Gln	Lys	Leu
	370						375					380			
Phe	Leu	Glu	Met	Ile	Gly	Asn	Leu	Val							
385					390										

<210> 80  
 <211> 321  
 <212> PRT  
 <213> Homo sapiens  
  
 <400> 80

Met 1	Asn	Asn	Leu	Leu 5	Cys	Cys	Ala	Leu	Val 10	Phe	Leu	Asp	Ile	Ser 15	Ile
Lys	Trp	Thr	Thr 20	Gln	Glu	Thr	Phe	Pro 25	Pro	Lys	Tyr	Leu	His 30	Tyr	Asp
Glu	Glu	Thr	Ser 35	His	Gln	Leu	Leu 40	Cys	Asp	Lys	Cys	Pro 45	Pro	Gly	Thr
Tyr	Leu 50	Lys	Gln	His	Cys	Thr 55	Ala	Lys	Trp	Lys	Thr 60	Val	Cys	Ala	Pro
Cys 65	Pro	Asp	His	Tyr	Tyr 70	Thr	Asp	Ser	Trp	His 75	Thr	Ser	Asp	Glu	Cys 80
Leu	Tyr	Cys	Ser	Pro 85	Val	Cys	Lys	Glu	Leu 90	Gln	Tyr	Val	Lys	Gln 95	Glu
Cys	Asn	Arg	Thr 100	His	Asn	Arg	Val	Cys 105	Glu	Cys	Lys	Glu	Gly 110	Arg	Tyr
Leu	Glu	Ile 115	Glu	Phe	Cys	Leu	Lys 120	His	Arg	Ser	Cys	Pro 125	Pro	Gly	Phe
Gly	Val 130	Val	Gln	Ala	Gly	Thr 135	Pro	Glu	Arg	Asn	Thr 140	Val	Cys	Lys	Arg
Cys 145	Pro	Asp	Gly	Phe	Phe 150	Ser	Asn	Glu	Thr	Ser 155	Ser	Lys	Ala	Pro	Cys 160
Arg	Lys	His	Thr	Asn 165	Cys	Ser	Val	Phe	Gly 170	Leu	Leu	Leu	Thr	Gln 175	Lys
Gly	Asn	Ala	Thr 180	His	Asp	Asn	Ile	Cys 185	Ser	Gly	Asn	Ser	Glu 190	Ser	Thr
Gln	Lys	Cys 195	Gly	Ile	Asp	Val	Thr 200	Leu	Cys	Glu	Glu	Ala 205	Phe	Phe	Arg
Phe	Ala 210	Val	Pro	Thr	Lys	Phe 215	Thr	Pro	Asn	Trp	Leu 220	Ser	Val	Leu	Val

Asp Asn Leu Pro Gly Thr Lys Val Asn Ala Glu Ser Val Glu Arg Ile  
 225 230 235 240

Lys Arg Gln His Ser Ser Gln Glu Gln Thr Phe Gln Leu Leu Lys Leu  
 245 250 255

Trp Lys His Gln Asn Lys Asp Gln Asp Ile Val Lys Lys Ile Ile Gln  
 260 265 270

Asp Ile Asp Leu Cys Glu Asn Ser Val Gln Arg His Ile Gly His Ala  
 275 280 285

Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu Met Glu Ser Leu Pro Gly  
 290 295 300

Lys Lys Val Gly Ala Glu Asp Ile Glu Lys Thr Ile Lys Ala Ser Leu  
 305 310 315 320

Asp

<210> 81  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 81

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu Gln Tyr Val Lys Gln Glu  
 85 90 95

Cys Asn Arg Thr His Asn Arg Val Cys Glu Cys Lys Glu Gly Arg Tyr  
 100 105 110

Leu Glu Ile Glu Phe Cys Leu Lys His Arg Ser Cys Pro Pro Gly Phe  
 115 120 125

Gly Val Val Gln Ala Gly Thr Pro Glu Arg Asn Thr Val Cys Lys Arg  
 130 135 140

Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr Ser Ser Lys Ala Pro Cys  
 145 150 155 160

Arg Lys His Thr Asn Cys Ser Val Phe Gly Leu Leu Leu Thr Gln Lys  
 165 170 175

Gly Asn Ala Thr His Asp Asn Ile Cys Ser Gly  
 180 185

<210> 82  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 82

Met Asn Asn Leu Leu Cys Cys Ala Leu Val Phe Leu Asp Ile Ser Ile  
 1 5 10 15

Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro Lys Tyr Leu His Tyr Asp  
 20 25 30

Glu Glu Thr Ser His Gln Leu Leu Cys Asp Lys Cys Pro Pro Gly Thr  
 35 40 45

Tyr Leu Lys Gln His Cys Thr Ala Lys Trp Lys Thr Val Cys Ala Pro  
 50 55 60

Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp His Thr Ser Asp Glu Cys  
 65 70 75 80

Leu Tyr Leu Val



<210> 83  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 83  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcctccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccctga ccactactac acagacagct ggacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctcctgg atttggagtgt gtgcaagctg gaaccccgaga gcgaaatata 420  
 gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgtg 480  
 agaaaacaca caaattgcag tgtctttggt ctctgtctaa ctcagaaagg aaatgcaaca 540  
 cacgacaaca tatgttccgg aaacagtga tcaactcaaa aaagtggaat agatgttacc 600  
 ctgtgtgagg aggcatctt caggtttgct gttcctacaa agtttacgcc taactggctt 660  
 agtgtcttgg tagacaattt gcctggcacc aaagtaaagc cagagagtgt agagaggata 720  
 aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa 780  
 aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc 840  
 gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa 900  
 agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcattgcaaa 960  
 cccagtgaac agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac 1020  
 accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact 1080  
 gtcactcaga gtctaaagaa gaccatcagg ttccttcaca gcttcacaat gtacaaattg 1140  
 tatcagaagt tattttttaga aatgataggt aaccagggtc aatcagtaaa aataagctgc 1200  
 ttataa 1206

<210> 84  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 84  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60

caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtctctcttg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc	300
cacaaccgcg tgtgccaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctccttg atttggagtgt gtgcaagctg gaaccccaaga gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtcttttgt ctctgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgagtggagg aggcatctct caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcatgcaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttcttcaca gcttcacaat gtacaaattg	1140
tatcagaagt tattttttaga aatgataggt aaccagggtcc aatcagtaaa aataagctgc	1200
ttataa	1206

<210> 85  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 85	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtctctcttg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc	300

cacaaccgcg	tgtgcgaatg	caaggaaggg	cgctaccttg	agatagagtt	ctgcttgaaa	360
cataggagct	gccctcctgg	atttgaggatg	gtgcaagctg	gaaccccaga	gcgaaataca	420
gtttgcaaaa	gatgtccaga	tgggttcttc	tcaaatgaga	cgtcactctaa	agcacctgt	480
agaaaacaca	caaattgcag	tgtctttggt	ctcctgctaa	ctcagaaagg	aaatgcaaca	540
cacgacaaca	tatgttccgg	aaacagtga	tcaactcaaa	aatgtggaat	agatgttacc	600
ctgtgtgagg	aggcattctt	caggtttgct	gttcctacaa	agtttacgcc	taactggctt	660
agtgtcttgg	tagacaattt	gcctggcacc	aaagtaaacg	cagagagtgt	agagaggata	720
aaacggcaac	acagctcaca	agaacagact	ttccagctgc	tgaagttatg	gaaacatcaa	780
aacaaagacc	aagatatagt	caagaagatc	atccaagata	ttgacctcag	tgaaaacagc	840
gtgcagcggc	acattggaca	tgctaacctc	accttcgagc	agcttcgtag	cttgatggaa	900
agcttaccgg	gaaagaaagt	gggagcagaa	gacattgaaa	aaacaataaa	ggcatgcaaa	960
cccagtgacc	agatcctgaa	gctgctcagt	ttgtggcgaa	taaaaaatgg	cgaccaagac	1020
accttgaagg	gcctaattgca	cgactaaaag	cactcaaaga	cgtaccactt	tcccaaaact	1080
gtcactcaga	gtctaaagaa	gaccatcagg	ttccttcaca	gcttcacaat	gtacaaattg	1140
tatcagaagt	tattttttaga	aatgataggt	aaccagggtcc	aatcagtaaa	aataagctgc	1200
ttataa						1206

<210> 86  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 86	
atgaacaact	tgctgtgctg
cgcgctcgtg	tttctggaca
tctccattaa	gtggaccacc
	60
caggaaacgt	ttcctccaaa
gtaccttcat	tatgacgaag
aaacctctca	tcagctgttg
	120
tgtgacaaat	gtcctcctgg
tacctaccta	aaacaacact
gtacagcaaa	gtggaagacc
	180
gtgtgcgcc	cttgccctga
ccactactac	acagacagct
ggcacaccag	tgacgagtgt
	240
ctatactgca	gccccgtgtg
caaggagctg	cagtacgtca
agcaggagtg	caatcgaccc
	300
cacaaccgcg	tgtgcgaatg
caaggaaggg	cgctaccttg
agatagagtt	ctgcttgaaa
	360
cataggagct	gccctcctgg
atttgaggatg	gtgcaagctg
gaaccccaga	gcgaaataca
	420
gtttgcaaaa	gatgtccaga
tgggttcttc	tcaaatgaga
cgtcactctaa	agcacctgt
	480
agaaaacaca	caaattgcag
tgtctttggt	ctcctgctaa
ctcagaaagg	aaatgcaaca
	540

cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcaagcaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttcttcacaa gcttcacaat gtacaaattg	1140
tatcagaagt tatTTTTtaga aatgataggt aaccagggtcc aatcagtaaa aataagctgc	1200
ttataa	1206

<210> 87  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 87	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtctctctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgcctga ccactactac acagacagct ggacacacag tgacgagtgt	240
ctataactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgaccc	300
cacaaccgcg tgtgcgaatg caaggaaggc cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctctctg atttgagtg gtgcaagctg gaacccagaa gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtctttggt ctctgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780

aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcatgcaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaatagca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttccttcaca gcttcacaat gtacaaattg	1140
tatcagaagt tattttttaga aatgataggt aaccagggtcc aatcagtaaa aataagcagc	1200
ttataa	1206

<210> 88  
 <211> 1083  
 <212> DNA  
 <213> Homo sapiens

<400> 88	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaacctt gccctgacca ctactacaca gacagctggc acaccagtga cgagtgtcta	120
tactgcagcc ccgtgtgcaa ggagctgcag tacgtcaagc aggagtgcaa tcgcacccac	180
aaccgcgtgt gcgaatgcaa ggaagggcgc taccttgaga tagagttctg cttgaaacat	240
aggagctgcc ctcttgatt tggagtggtg caagctggaa cccagagcg aaatacagtt	300
tgcaaaagat gtccagatgg gttcttctca aatgagacgt catctaaagc accctgtaga	360
aaacacacaa attgcagtgt ctttggtctc ctgctaactc agaaaggaaa tgcaacacac	420
gacaacatat gttccgaaa cagtgaatca actcaaaaat gtggaataga tgttaccctg	480
tgtgaggagg cattcttcag gtttgctgtt cctacaaagt ttacgcctaa ctggcttagt	540
gtcttggtag acaatttgcc tggcaccaaa gtaaacgcag agagtgtaga gaggataaaa	600
cggcaacaca gtcacaaga acagactttc cagctgctga agttatggaa acatcaaaac	660
aaagaccaag atatagtcaa gaagatcatc caagatattg acctctgtga aaacagcgtg	720
cagcggcaca ttggacatgc taacctcacc ttcgagcagc ttcgtagctt gatggaaagc	780
ttaccgggaa agaaagtggg agcagaagac attgaaaaaa caataaaggc atgcaaacc	840
agtgaccaga tctgaagct gctcagtttg tggcgaataa aaaatggcga ccaagacacc	900
ttgaagggcc taatgcacgc actaaagcac tcaaagacgt accactttcc caaaactgtc	960
actcagagtc taaagaagac catcagggtc cttcacagct tcacaatgta caaattgtat	1020

cagaagttat ttttagaaat gataggtaac caggtccaat cagtaaaaat aagctgctta 1080  
 taa 1083

<210> 89  
 <211> 1080  
 <212> DNA  
 <213> Homo sapiens

<400> 89  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgcgc aatgcaagga agggcgctac cttgagatag agttctgctt gaaacatagg 240  
 agctgccttc ctggatttgg agtggtgcaa gctggaaccc cagagcgaaa tacagtttgc 300  
 aaaagatgtc cagatgggtt cttctcaaat gagacgtcat ctaaagcacc ctgtagaaaa 360  
 cacacaaatt gcagtgtctt tggctcctcg ctaactcaga aaggaaatgc aacacacgac 420  
 aacatatgtt ccggaacag tgaatcaact caaaaatgtg gaatagatgt taccctgtgt 480  
 gaggaggcat tcttcaggtt tgctgttcct acaaagttta cgctaactg gcttagtgctc 540  
 ttggtagaca atttgctgg caccaaagta aacgcagaga gtgtagagag gataaaacgg 600  
 caacacagct cacaagaaca gactttccag ctgctgaagt tatggaaaca tcaaaacaaa 660  
 gaccaagata tagtcaagaa gatcatccaa gatattgacc tctgtgaaaa cagcgtgcag 720  
 cggcacattg gacatgctaa cctcaccttc gagcagcttc gtagcttgat ggaaagctta 780  
 ccgggaaaga aagtgggagc agaagacatt gaaaaaaca taaaggcatg caaacccagt 840  
 gaccagatcc tgaagctgct cagtttgtgg cgaataaaaa atggcgacca agacaccttg 900  
 aagggcctaa tgcacgcact aaagcactca aagacgtacc actttcccaa aactgtcact 960  
 cagagtctaa agaagaccat caggttcctt cacagcttca caatgtacaa attgtatcag 1020  
 aagttatatt tagaaatgat aggtaaccag gtccaatcag taaaaataag ctgcttataa 1080

<210> 90  
 <211> 1092  
 <212> DNA  
 <213> Homo sapiens

<400> 90  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120

tgtgacaaat	gtcctcctgg	tacctacctta	aaacaacact	gtacagcaaa	gtggaagacc	180
gtgtgcgccc	cttgccctga	ccactactac	acagacagct	ggcacaccag	tgacgagtgt	240
ctatactgca	gccccgtgtg	caaggagctg	cagtacgtca	agcaggagtg	caatcgcacc	300
cacaaccgcg	tgtgcagatg	tccagatggg	ttctttctcaa	atgagacgtc	atctaaagca	360
ccctgtagaa	aacacacaaa	ttgcagtgtc	tttgggtctcc	tgctaactca	gaaaggaaat	420
gcaacacacg	acaacatatg	ttccggaaaac	agtgaatcaa	ctcaaaaatg	tggaatagat	480
gttaccctgt	gtgaggaggc	attcttcagg	tttgtctgtc	ctacaaagtt	tacgcctaac	540
tggcttagtg	tcttggtaga	caatttgct	ggcaccaaag	taaacgcaga	gagtgtagag	600
aggataaaaac	ggcaacacag	ctcacaaaga	cagactttcc	agctgctgaa	gttatggaaa	660
catcaaaaaca	aagaccaaga	tatagtcaag	aagatcatcc	aagatattga	cctctgtgaa	720
aaacgcgtgc	agcggcacat	tggacatgct	aacctcacct	tcgagcagct	tcgtagcttg	780
atggaaaagct	taccgggaaa	gaaagtggga	gcagaagaca	ttgaaaaaac	aataaaggca	840
tgcaaacccea	gtgaccagat	cctgaagctg	ctcagtttgt	ggcgaataaa	aaatggcgac	900
caagacacct	tgaagggcct	aatgcacgca	ctaaagcact	caaagacgta	ccactttccc	960
aaaactgtca	ctcagagtct	aaagaagacc	atcaggttcc	ttcacagctt	cacaatgtac	1020
aaattgtatc	agaagttatt	tttagaaaatg	ataggtaacc	aggtccaatc	agtaaaaaata	1080
agctgcttat	aa					1092

gaggaggcat	tcttcaggtt	tgctgttcct	acaaagttta	cgctaactg	gcttagtgct	540
ttggtagaca	atttgcttg	caccaaagta	aacgcagaga	gtgtagagag	gataaacgg	600
caacacagct	cacaagaaca	gactttccag	ctgctgaagt	tatggaaaca	tcaaaacaaa	660
gaccaagata	tagtcaagaa	gatcatccaa	gatattgacc	tctgtgaaaa	cagcgtgcag	720
cggcacattg	gacatgctaa	cctcaccttc	gagcagcttc	gtagcttgat	ggaaagctta	780
ccgggaaaga	aagtgggagc	agaagacatt	gaaaaaaca	taaaggcatg	caaaccagct	840
gaccagatcc	tgaagctgct	cagtttgtgg	cgaataaaaa	atggcgacca	agacaccttg	900
aagggcctaa	tgacgcact	aaagcactca	aagacgtacc	actttcccaa	aactgtcact	960
cagagtctaa	agaagaccat	caggttcctt	cacagcttca	caatgtacaa	attgtatcag	1020
aagttatatt	tagaaatgat	aggtaaccag	gtccaatcag	taaaaataag	ctgcttataa	1080

<210> 92  
 <211> 981  
 <212> DNA  
 <213> Homo sapiens

<400> 92		
atgaacaact	tgctgtgctg	60
caggaaacgt	ttcctccaaa	120
tgtagacaaat	gtcctcctgg	180
gtgtgcgccc	cttgccctga	240
ctataactgca	gccccgtgtg	300
cacaaccgcg	tgtgcgaatg	360
cataggagct	gccctcctgg	420
gtttgcaaaa	gatgtccaga	480
agaaaacaca	caaattgcag	540
cacgacaaca	tatgttccgg	600
ctctgtgaaa	acagcgtgca	660
cgtagcttga	tggaaagctt	720
ataaaggcat	gcaaaccag	780
aatggcgacc	aagacacctt	840
cactttccca	aaactgtcac	900



acaatgtaca aattgtatca gaagttatTTt ttagaaatga taggtaacca ggtccaatca	960
gtaaaaataa gctgcttata a	981

<210> 93  
 <211> 984  
 <212> DNA  
 <213> Homo sapiens

<400> 93	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaaggc cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttggagtg gtgcaagctg gaaccccaga gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtctttggt ctctgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagacg cactaaagca ctcaaagacg	840
taccactttc ccaaaactgt cactcagagt ctaaagaaga ccatcagggt cttcacagc	900
ttcacaatgt acaaattgta tcagaagtta tttttagaaa tgataggtaa ccagggtccaa	960
tcagtaaaaa taagctgctt ataa	984

<210> 94  
 <211> 1200  
 <212> DNA  
 <213> Homo sapiens

<400> 94	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120

tgtagacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttggagtg gtgcaagctg gaaccccaga gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtctttggt ctctgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcatctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttg tagacaattt gcctggcacc aaagtaaagc cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcatgcaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttccttcaca gcttcacaat gtacaaattg	1140
tatcagaagt tattttttaga aatgataggt aaccagggtc aatcagtaaa aataagctaa	1200

<210> 95  
 <211> 1056  
 <212> DNA  
 <213> Homo sapiens

<400> 95	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtagacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttggagtg gtgcaagctg gaaccccaga gcgaaataca	420

gtttgcaaaa gatgtccaga tgggttcttc tcaaatagaga cgtcatctaa agcacccctgt	480
agaaaacaca caaattgcag tgtcttttgggt ctcttgctaa ctcaaaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcattgaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaatagca cgcactaaag cactga	1056

<210> 96  
 <211> 819  
 <212> DNA  
 <213> Homo sapiens

<400> 96	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcttcaaaa gtaccttcat tatgacgaag aaactctctca tcagctgttg	120
tgtgacaaat gtctctctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgcctga ccactactac acagacagct ggacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaagg cgctacctg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttgagtg gtgcaagctg gaaccccaga gcgaaatata	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatagaga cgtcatctaa agcacccctgt	480
agaaaacaca caaattgcag tgtcttttgggt ctcttgctaa ctcaaaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaattt gcctggcacc aaagtaaacg cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaatga	819

<210> 97  
 <211> 594  
 <212> DNA  
 <213> Homo sapiens

<400> 97  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcttctctg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccttga ccactactac acagacagct ggcacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctccttg atttgagtg gtgcaagctg gaaccccgaga gcgaaatata 420  
 gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgtg 480  
 agaaaacaca caaattgcag tgtctttggt ctcttgctaa ctcagaaagg aaatgcaaca 540  
 cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat atga 594

<210> 98  
 <211> 432  
 <212> DNA  
 <213> Homo sapiens

<400> 98  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcttctctg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccttga ccactactac acagacagct ggcacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaaggg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctccttg atttgagtg gtgcaagctg gaaccccgaga gcgaaatata 420  
 gtttgcaaat ga 432

<210> 99  
 <211> 321  
 <212> DNA  
 <213> Homo sapiens

<400> 99

atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttctctcaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg a	321

<210> 100  
 <211> 1182  
 <212> DNA  
 <213> Homo sapiens

<400> 100	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttctctcaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttgagtg gtgcaagctg gaaccccaaga gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaatgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtcttttgt ctcttgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc	600
ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt	660
agtgtcttgg tagacaatth gcctggcacc aaagtaaacy cagagagtgt agagaggata	720
aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa	780
aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc	840
gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa	900
agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggcattgaaa	960
cccagtgacc agatcctgaa gctgctcagt ttgtggcgaa taaaaaatgg cgaccaagac	1020
accttgaagg gcctaataca cgcactaaag cactcaaaga cgtaccactt tcccaaaact	1080
gtcactcaga gtctaaagaa gaccatcagg ttcttccaca gcttcacaat gtacaaattg	1140

tatcagaagt tattttttaga aatgataggt aacctagtct ag 1182

<210> 101  
 <211> 966  
 <212> DNA  
 <213> Homo sapiens

<400> 101  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccctga ccactactac acagacagct ggacaccag tgacgagtgt 240  
 ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtgt caatcgcacc 300  
 cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa 360  
 cataggagct gccctcctgg atttgagtg gtgcaagctg gaaccccaga gcgaaatata 420  
 gtttgcaaaa gatgtccaga tgggttcttc tcaaatagaga cgtcatctaa agcaccctgt 480  
 agaaaacaca caaattgcag tgtctttggt ctctgctaa ctcagaaagg aaatgcaaca 540  
 cagacaaca tatgttccgg aaacagtga tcaactcaaa aatgtggaat agatgttacc 600  
 ctgtgtgagg aggcattctt caggtttgct gttcctacaa agtttacgcc taactggctt 660  
 agtgtcttgg tagacaattt gcctggcacc aaagtaaagc cagagagtgt agagaggata 720  
 aaacggcaac acagctcaca agaacagact ttccagctgc tgaagttatg gaaacatcaa 780  
 aacaaagacc aagatatagt caagaagatc atccaagata ttgacctctg tgaaaacagc 840  
 gtgcagcggc acattggaca tgctaacctc accttcgagc agcttcgtag cttgatggaa 900  
 agcttaccgg gaaagaaagt gggagcagaa gacattgaaa aaacaataaa ggctagtcta 960  
 gactag 966

<210> 102  
 <211> 564  
 <212> DNA  
 <213> Homo sapiens

<400> 102  
 atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc 60  
 caggaaacgt ttcttccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg 120  
 tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc 180  
 gtgtgcgccc cttgccctga ccaactactac acagacagct ggacaccag tgacgagtgt 240

ctatactgca gccccgtgtg caaggagctg cagtacgtca agcaggagtg caatcgcacc	300
cacaaccgcg tgtgcgaatg caaggaagg cgctaccttg agatagagtt ctgcttgaaa	360
cataggagct gccctcctgg atttggagtg gtgcaagctg gaaccccaga gcgaaataca	420
gtttgcaaaa gatgtccaga tgggttcttc tcaaattgaga cgtcatctaa agcacctgt	480
agaaaacaca caaattgcag tgtctttggt ctctgctaa ctcagaaagg aaatgcaaca	540
cacgacaaca tatgttccgg ctag	564

<210> 103  
 <211> 255  
 <212> DNA  
 <213> Homo sapiens

<400> 103	
atgaacaact tgctgtgctg cgcgctcgtg tttctggaca tctccattaa gtggaccacc	60
caggaaacgt ttcctccaaa gtaccttcat tatgacgaag aaacctctca tcagctgttg	120
tgtgacaaat gtcctcctgg tacctaccta aaacaacact gtacagcaaa gtggaagacc	180
gtgtgcgccc cttgccctga ccactactac acagacagct ggcacaccag tgacgagtgt	240
ctatacctag tctag	255

<210> 104  
 <211> 1317  
 <212> DNA  
 <213> Homo sapiens

<400> 104	
ctggagacat ataacttgaa cacttggccc tgatggggaa gcagctctgc agggactttt	60
tcagccatct gtaaacaatt tcagtggcaa cccgcgaact gtaatccatg aatgggacca	120
cactttacaa gtcacaaagt ctaacttcta gaccagggaa ttaatggggg agacagcgaa	180
ccctagagca aagtgcacaa cttctgtcga tagcttgagg ctagtggaaa gacctcgagg	240
aggctactcc agaagttcag cgcgtaggaa gctccgatac caatagccct ttgatgatgg	300
tgggggttgg gaaggggaaca gtgctccgca aggttatccc tgccccaggc agtccaattt	360
tcactctgca gattctctct ggctctaact accccagata acaaggagtg aatgcagaat	420
agcacgggct ttagggccaa tcagacatta gttagaaaaa ttcctactac atggtttatg	480
taaacttgaa gatgaatgat tgcgaactcc ccgaaaaggg ctgagacaat gccatgcata	540
aagagggggc ctgtaatttg aggtttcaga acccgaagtg aaggggtcag gcagccgggt	600

acggcgga	ctcacagctt	tcgcccagcg	agaggacaaa	ggtctgggac	acactccaac	660
tgcgctccgga	tcttggttg	atcggactct	caggggtggag	gagacacaag	cacagcagct	720
gccagcgtg	tgcccagccc	tcccaccgct	ggtcccggct	gccaggaggc	tggccgctgg	780
cgggaagggg	ccgggaaacc	tcagagcccc	gcggagacag	cagccgcctt	gttcctcagc	840
ccggtggctt	ttttttcccc	tgctctccca	ggggacagac	accaccgccc	caccctcac	900
gccccacctc	cctgggggat	cctttccgcc	ccagccctga	aagcgtaaat	cctggagctt	960
tctgcacacc	ccccgaccgc	tcccgcccaa	gcttcctaaa	aaagaaaggt	gcaaagtttg	1020
gtccaggata	gaaaaatgac	tgatcaaagg	caggcgatac	ttcctgttgc	cgggacgcta	1080
tatataacgt	gatgagcgca	cgggctgcgg	agacgcaccg	gagcgctcgc	ccagccgccc	1140
cctccaagcc	cctgaggttt	ccggggacca	caatgaacaa	gttgctgtgc	tgcgcgctcg	1200
tggtaatcc	ctgggccagc	cgacgggtgc	ccggcgcttg	gggaggctgc	tgccacctgg	1260
tctcccaacc	tcccagcgga	ccggcgggga	aaaaggctcc	actcgctccc	tcccaag	1317

<210> 105  
 <211> 10190  
 <212> DNA  
 <213> Homo sapiens

<400> 105						
gcttactttg	tgccaaatct	cattaggctt	aaggtaatac	aggactttga	gtcaaatgat	60
actgttgcac	ataagaacaa	acctattttc	atgctaagat	gatgccactg	tgttcctttc	120
tccttctagt	ttctggacat	ctccattaag	tggaccaccc	aggaaacgtt	tcctccaaag	180
taccttcatt	atgacgaaga	aacctctcat	cagctgttgt	gtgacaaatg	tcctcctggt	240
acctaccta	aacaacactg	tacagcaaag	tgaagaccg	tgtgcgcccc	ttgccctgac	300
cactactaca	cagacagctg	gcacaccagt	gacgagtgtc	tatactgcag	ccccgtgtgc	360
aaggagctgc	agtacgtcaa	gcaggagtgc	aatcgacccc	acaaccgcgt	gtgcgaatgc	420
aaggaagggc	gctaccttga	gatagagttc	tgcttgaaac	ataggagctg	ccctcctgga	480
tttgagtg	tgcaagctgg	tacgtgtcaa	tgtgcagcaa	aattaattag	gatcatgcaa	540
agtcagatag	ttgtgacagt	ttaggagaac	acttttgttc	tgatgacatt	ataggatagc	600
aaattgcaaa	ggtaatgaaa	cctgccagggt	aggactatg	tgtctggagt	gcttccaaag	660
gaccattgct	cagaggaata	ctttgccact	acagggcaat	ttaatgacaa	atctcaaag	720
cagcaaatta	ttctctcatg	agatgcatga	tggttttttt	tttttttttt	aaagaaacaa	780



actcaagttg cactattgat agttgatcta tacctctata tttcacttca gcatggacac	840
cttcaaactg cagcactttt tgacaaacat cagaaatgtt aattttatacc aagagagtaa	900
ttatgctcat attaatgaga ctctggagtg ctaacaataa gcagttataa ttaattatgt	960
aaaaaatgag aatggtgagg ggaattgcat ttcattatta aaaacaaggc tagttcttcc	1020
tttagcatgg gagctgagtg tttgggaggg taaggactat agcagaatct cttcaatgag	1080
cttattcttt atcttagaca aaacagattg tcaagccaag agcaagcact tgcctataaa	1140
ccaagtgctt tctcttttgc attttgaaca gcattggtca gggctcatgt gtattgaatc	1200
ttttaaacca gtaaccacg ttttttttct gccacatttg cgaagcttca gtgcagccta	1260
taacttttca tagcttgaga aaattaagag tatccactta cttagatgga agaagtaatc	1320
agtatagatt ctgatgactc agtttgaagc agtgtttctc aactgaagcc ctgctgatat	1380
tttaagaaat atctggattc ctaggctgga ctcttttttg tgggcagctg tcttgcgcat	1440
tgtagaattt tggcagcacc cctggactct agccactaga taccaatagc agtccttccc	1500
ccatgtgaca gccaaaaatg tcttcagaca ctgtcaaatg tcgccaggtg gcaaaatcac	1560
tcctggttga gaacagggtc atcaatgcta agtatctgta actattttta ctctcaaaac	1620
ttgtgatata caaagtctaa attattagac gaccaatact ttaggtttta aggcatacaa	1680
atgaaacatt caaaaatcaa aatctattct gtttctcaaa tagtgaatct tataaaatta	1740
atcacagaag atgcaaattg catcagagtc ccttaaaatt cctcttcgta tgagtatttg	1800
agggaggaat tggatagatg tcctactttc tattggatgg tactttgaga ctcaaaagct	1860
aagctaagtt gtgtgtgtgt caggggtgcg ggtgtggaat cccatcagat aaaagcaaat	1920
ccatgtaatt cattcagtaa gttgtatatg tagaaaaatg aaaagtgggc tatgcagctt	1980
ggaaactaga gaattttgaa aaataatgga aatcacaagg atctttctta aataagtaag	2040
aaaatctgtt tgtagaatga agcaagcagg cagccagaag actcagaaca aaagtacaca	2100
ttttactctg tgtacactgg cagcacagtg ggatttattt acctctccct ccctaaaaac	2160
ccacacagcg gttcctcttg ggaaataaga ggtttccagc ccaaagagaa ggaaagacta	2220
tgtggtgtta ctctaaaaag tatttaataa ccgttttggt gttgctgttg ctgttttgaa	2280
atcagattgt ctctctcca tattttattt acttcattct gttaattcct gtggaattac	2340
ttagagcaag catggtgaat tctcaactgt aaagccaaat ttctccatca ttataatttc	2400
acattttgcc tggcaggtta taatttttat atttccactg atagtaataa ggtaaaatca	2460
ttacttagat ggatagatct ttttcataaa aagtaccatc agttatagag ggaagtcag	2520

ttcatgttca ggaaggtcat tagataaagc ttctgaatat attatgaaac attagttctg	2580
tcattcttag attctttttg ttaaataact ttaaaagcta acttacctaa aagaaatc	2640
tgacacatat gaacttctca ttaggatgca ggagaagacc caagccacag atatgtatct	2700
gaagaatgaa caagattctt aggcccgga cggtggctca catctgtaat ctcaagagtt	2760
tgagaggtca aggcgggcag atcacctgag gtcaggagtt caagaccagc ctggccaaca	2820
tgatgaaacc ctgcctctac taaaaataca aaaattagca gggcatgggtg gtgcatgcct	2880
gcaaccctag ctactcagga ggctgagaca ggagaatctc ttgaaccctc gaggcggagg	2940
ttgtggtgag ctgagatccc tctactgcac tccagcctgg gtgacagaga tgagactccg	3000
tccctgccgc cgccccgcc tccccccca aaaagattct tcttcatgca gaacatacgg	3060
cagtcaacaa agggagacct ggggtccaggt gtccaagtca cttatttcga gtaaattagc	3120
aatgaaagaa tgccatggaa tccctgccca aatacctctg cttatgatata tgtagaattt	3180
gatatagagt tgtatcccat ttaaggagta ggatgtagta ggaaagtact aaaaacaaac	3240
acacaaacag aaaaccctct ttgctttgta aggtggttcc taagataatg tcagtgcaat	3300
gctggaaata atattttaata tgtgaagggt ttaggctgtg ttttccctc ctgttctttt	3360
tttctgccag ccctttgtca tttttgcagg tcaatgaatc atgtagaaag agacaggaga	3420
tgaaactaga accagtcctat ttggccctt tttttatttt ctggttttgg taaaagatac	3480
aatgaggtag gaggttgaga ttataaatg aagtttaata agtttctgta gctttgattt	3540
ttctctttca tatttgttat cttgcataag ccagaattgg cctgtaaaat ctacatatgg	3600
atattgaagt ctaaactctgt tcaactagct tacactagat ggagatattt tcatattcag	3660
atacactgga atgtatgac tagccatgcg taatatagtc aagtgtttga aggtatttat	3720
ttttaatagc gtcttttagtt gtggactggg tcaagttttt ctgccaatga tttcttcaaa	3780
tttatcaaata atttttccat catgaagtaa aatgcccttg cagtcaccct tcctgaagtt	3840
tgaacgactc tgctgtttta aacagtttaa gcaaatggta tatcatcttc cgtttactat	3900
gtagcttaac tgcaggctta cgcttttgag tcagcggcca actttattgc caccttcaaa	3960
agtttattat aatgttgtaa atttttactt ctcaagggtta gcatacttag gagttgcttc	4020
acaattagga ttcaggaaag aaagaacttc agtaggaact gattggaatt taatgatgca	4080
gcattcaatg ggtactaatt tcaaagaatg atattacagc agacacacag cagttatctt	4140
gattttctag gaataattgt atgaagaata tggctgacaa cacggcctta ctgccactca	4200

gcggaggctg	gactaatgaa	caccctaccc	ttctttcctt	tcctctcaca	tttcatgagc	4260
gtttttagtg	taacgagaaa	attgacttgc	atgtgcatta	caaggaggag	aaactggcaa	4320
aggggatgat	ggtggaagtt	ttgttctgtc	taatgaagtg	aaaaatgaaa	atgctagagt	4380
tttgtgcaac	ataatagtag	cagtaaaaac	caagtgaaaa	gtctttccaa	aactgtgtta	4440
agagggcatc	tgctgggaaa	cgatttgagg	agaagggtact	aaattgcttg	gtattttccg	4500
taggaacccc	agagcgaaat	acagtttgca	aaagatgtcc	agatgggttc	ttctcaaattg	4560
agacgtcatc	taaagcacc	tgtagaaaac	acacaaattg	cagtgtcttt	ggtctcctgc	4620
taactcagaa	aggaaatgca	acacacgaca	acatatgttc	cggaaacagt	gaatcaactc	4680
aaaaatgtgg	aataggtaat	tacattccaa	aatacgtctt	tgtacgattt	tgtagtatca	4740
tctctctctc	tgagttgaac	acaaggcctc	cagccacatt	cttgggtcaaa	cttacatttt	4800
ccctttcttg	aatcttaacc	agctaaggct	actctcgatg	cattactgct	aaagctacca	4860
ctcagaatct	ctcaaaaact	catcttctca	cagataacac	ctcaaagctt	gattttctct	4920
cctttcacac	tgaaatcaaa	tcttgcccat	aggcaaagg	cagtgtcaag	tttgccactg	4980
agatgaaatt	aggagagtcc	aaactgtaga	attcacgttg	tgtgttatta	ctttcacgaa	5040
tgtctgtatt	attaactaaa	gtatatattg	gcaactaaga	agcaaagtga	tataaacatg	5100
atgacaaatt	aggccaggca	tggtggctta	ctcctataat	cccaacattt	tggggggcca	5160
aggtaggcag	atcacttgag	gtcaggattt	caagaccagc	ctgaccaaca	tggtgaaacc	5220
ttgtctctac	taaaaataca	aaaattagct	gggcatggta	gcaggcactt	ctagtaccag	5280
ctactcaggg	ctgaggcagg	agaatcgctt	gaaccagga	gatggagggt	gcagtgagct	5340
gagattgtac	cactgcactc	cagtctgggc	aacagagcaa	gatttcatca	cacacacaca	5400
cacacacaca	cacacacaca	ttagaaatgt	gtacttggct	ttgttaccta	tggtattagt	5460
gcatctattg	catggaactt	ccaagctact	ctggttgtgt	taagctcttc	attgggtaca	5520
ggtcactagt	attaagttca	ggttattcgg	atgcattcca	cggtagtgat	gacaattcat	5580
caggctagtg	tgtgtgttca	ccttgtcact	cccaccacta	gactaatctc	agaccttcac	5640
tcaaagacac	attacactaa	agatgatttg	cttttttgtg	tttaatcaag	caatgggtata	5700
aaccagcttg	actctcccca	aacagttttt	cgtactacaa	agaagtttat	gaagcagaga	5760
aatgtgaatt	gatatatata	tgagattcta	accagttcc	agcattgttt	cattgtgtaa	5820
ttgaaatcat	agacaagcca	ttttagcctt	tgctttctta	tctaaaaaaaa	aaaaaaaaaaa	5880
aatgaaggaa	ggggtattaa	aaggagtgat	caaattttta	cattctcttt	aattaattca	5940

ttttaatttt tacttttttt cattttattgt gcacttacta tgtggtactg tgctatagag	6000
gctttaacat ttataaaaac actgtgaaag ttgcttcaga tgaatatagg tagtagaacg	6060
gcagaactag tattcaaagc caggctctgat gaatccaaaa acaaacaccc attactccca	6120
ttttctggga catacttact ctaccagat gctctgggct ttgtaatgcc tatgtaaata	6180
acatagtttt atgtttggtt attttcctat gtaatgtcta cttatatatc tgtatctatc	6240
tcttgctttg tttccaaagg taaactatgt gtctaaatgt gggcaaaaaa taacacacta	6300
ttccaaatta ctgttcaaat tcctttaagt cagtgataat tatttgtttt gacattaatc	6360
atgaagttcc ctgtgggtac taggtaaacc tttaatagaa tgtaaatggt tgtattcatt	6420
ataagaattt ttggctgtta cttatttaca acaatatttc actctaatta gacatttact	6480
aaactttctc ttgaaaacaa tgcccaaaaa agaacattag aagacacgta agctcagttg	6540
gtctctgcc aagaccag ccaacagaag cttgatttta ttcaaacttt gcatttttagc	6600
atattttatc ttggaaaatt caattgtgtt ggttttttgt ttttgtttgt attgaataga	6660
ctctcagaaa tccaattggt gagtaaactc tctgggtttt ctaacctttc tttagatggt	6720
accctgtgtg aggaggcatt cttcagggtt gctgttctca caaagtttac gcctaactgg	6780
cttagtgtct tggtagacaa tttgcctggc accaaagtaa acgcagagag ttagagagg	6840
ataaacggc aacacagctc acaagaacag actttccagc tgctgaagtt atggaaacat	6900
caaaacaaag accaagatat agtcaagaag atcatccaag gtaattacat tccaaaatac	6960
gtctttgtac gattttgtag tatcatctct ctctctgagt tgaacacaag gcctccagcc	7020
acattcttg tcaaacttac attttcctt tcttgaatct taaccagcta aggctactct	7080
cgatgcatta ctgctaaagc taccactcag aatctctcaa aaactcatct tctcacagat	7140
aacacctcaa agcttgattt tctctcctt cactgaaa tcaaactctg cccataggca	7200
aagggcagtg tcaagtttgc cactgagatg aaattaggag agtccaaact gtagaattca	7260
cgttgtgtgt tattactttc acgaatgtct gtattattaa ctaaagtata tattggcaac	7320
taagaagcaa agtgatataa acatgatgac aaattaggcc aggcattggtg gcttactcct	7380
ataatcccaa cattttgggg ggccaaggta ggcagatcac ttgaggtcag gatttcaaga	7440
ccagcctgac caacatggtg aaaccttgct tctactaaaa atacaaaaat tagctgggca	7500
tggtagcagg cacttctagt accagctact cagggctgag gcaggagaat cgcttgaacc	7560
caggagatgg aggttgagc gagctgagat tgtaccactg cactccagtc tgggcaacag	7620

agcaagattt catcacacac acacacacac acacacacac acacattaga aatgtgtact	7680
tggcttttgtt acctatggta ttagtgcac c tattgcatgg aacttccaag ctactctgg	7740
tgtgttaagc tcttcattgg gtacaggcca ctagtattaa gttcagggtta ttcggatgca	7800
ttccacggta gtgatgacaa ttcacaggc tagtgtgtgt gttcaccttg tcaactccac	7860
cactagacta atctcagacc ttcactcaaa gacacattac actaaagatg atttgctttt	7920
ttgtgtttta tcaagcaatg gtataaacca gcttgactct ccccaaacag tttttcgtac	7980
tacaaagaag tttatgaagc agagaaatgt gaattgatat atatatgaga ttctaacc	8040
gttccagcat tgtttcattg tgtaattgaa atcatagaca agccatttta gcctttgctt	8100
tcttatctaa aaaaaaaaaa aaaaaaatga aggaaggggt attaaaagga gtgatcaaat	8160
tttaacattc tctttaatta attcattttt aattttactt tttttcattt attgtgcact	8220
tactatgtgg tactgtgcta tagaggcttt aacatttata aaaacactgt gaaagttgct	8280
tcagatgaat ataggtagta gaacggcaga actagtattc aaagccaggc ctgatgaatc	8340
caaaaacaaa caccattac tcccattttc tgggacatac ttactctacc cagatgctct	8400
gggcttttga atgcctatgt aaataacata gttttatgtt tggttatttt cctatgta	8460
gtctacttat atatctgtat ctatctcttg ctttgtttcc aaaggtaa	8520
aatgtgggca aaaaataaca cactattcca aattactgtt caaatccctt taagtcagt	8580
ataattattt gttttgacat taatcatgaa gttccctgtg ggtactagg	8640
tagaatgtta atgtttgtat tcattataag aatttttggc tgttacttat ttacaaca	8700
atttcactct aattagacat ttactaaact ttctcttgaa aacaatgcc aaaaaaga	8760
attagaagac acgtaagctc agttggctc tgccactaag accagccaac agaagctga	8820
ttttattcaa actttgcatt ttagcatatt ttatcttgga aaattcaatt gtgttggtt	8880
tttgtttttg tttgtattga atagactctc agaaatccaa ttgttgagta aatcttctg	8940
gttttctaac ctttctttag atattgacct ctgtgaaaac agcgtgcagc ggcacattg	9000
acatgctaac ctcaccttcg agcagcttcg tagcttgatg gaaagcttac cgggaaaga	9060
agtgggagca gaagacattg aaaaaacaat aaaggcatgc aaaccagtg accagatcct	9120
gaagctgctc agtttgtggc gaataaaaaa tggcgaccaa gacaccttga agggccta	9180
gcacgcacta aagcactcaa agacgtacca ctttcccaaa actgtcactc agagtctaaa	9240
gaagaccatc aggttccttc acagcttcac aatgtacaaa ttgtatcaga agttattttt	9300
agaaatgata ggtaaccagg tccaatcagt aaaaataagc tgcttataac tggaaatggc	9360

cattgagctg tttcctcaca attggcgaga tcccatggat gagtaaactg tttctcaggc 9420  
acttgaggct ttcagtgata tctttctcat taccagtgc taattttgcc acaggggtact 9480  
aaaagaaact atgatgtgga gaaaggacta acatctcctc caataaaccc caaatggta 9540  
atccaactgt cagatctgga tcgttatcta ctgactatat tttcccttat tactgcttgc 9600  
agtaattcaa ctggaaatta aaaaaaaaaa actagactcc actgggcctt actaaatatg 9660  
ggaatgtcta acttaaatag ctttgggatt ccagctatgc tagaggcttt tattagaaag 9720  
ccatattttt ttctgtaaaa gttactaata tatctgtaac actattacag tattgctatt 9780  
tatattcatt cagatataag atttggacat attatcatcc tataaagaaa cggtatgact 9840  
taattttaga aagaaaatta tattctgttt attatgacaa atgaaagaga aaatatatat 9900  
ttttaatgga aagtttgtag cttttttcta ataggtactg ccatattttt ctgtgtggag 9960  
tatttttata attttatctg tataagctgt aatatcattt tatagaaaat gcattattta 10020  
gtcaattgtt taatgttgga aaacatatga aatataaatt atctgaatat tagatgctct 10080  
gagaaattga atgtacctta tttaaaagat tttatggttt tataactata taaatgacat 10140  
tattaaagtt ttcaaattat tttttattgc tttctctgtt gcttttattt 10190

<210> 106  
<211> 391  
<212> PRT  
<213> Homo sapiens

<400> 106

Phe Leu Asp Ile Ser Ile Lys Trp Thr Thr Gln Glu Thr Phe Pro Pro  
1 5 10 15

Lys Tyr Leu His Tyr Asp Glu Glu Thr Ser His Gln Leu Leu Cys Asp  
20 25 30

Lys Cys Pro Pro Gly Thr Tyr Leu Lys Gln His Cys Thr Ala Lys Trp  
35 40 45

Lys Thr Val Cys Ala Pro Cys Pro Asp His Tyr Tyr Thr Asp Ser Trp  
50 55 60

His Thr Ser Asp Glu Cys Leu Tyr Cys Ser Pro Val Cys Lys Glu Leu  
65 70 75 80

Gln Tyr Val Lys Gln Glu Cys Asn Arg Thr His Asn Arg Val Cys Glu  
85 90 95

Cys Lys Glu Gly Arg Tyr Leu Glu Ile Glu Phe Cys Leu Lys His Arg  
100 105 110

Ser Cys Pro Pro Gly Phe Gly Val Val Gln Ala Gly Thr Pro Glu Arg  
115 120 125

Asn Thr Val Cys Lys Arg Cys Pro Asp Gly Phe Phe Ser Asn Glu Thr  
130 135 140

Ser Ser Lys Ala Pro Cys Arg Lys His Thr Asn Cys Ser Val Phe Gly  
145 150 155 160

Leu Leu Leu Thr Gln Lys Gly Asn Ala Thr His Asp Asn Ile Cys Ser  
165 170 175

Gly Asn Ser Glu Ser Thr Gln Lys Cys Gly Ile Asp Val Thr Leu Cys  
180 185 190

Glu Glu Ala Phe Phe Arg Phe Ala Val Pro Thr Lys Phe Thr Pro Asn  
195 200 205

Trp Leu Ser Val Leu Val Asp Asn Leu Pro Gly Thr Lys Val Asn Ala  
210 215 220

Glu Ser Val Glu Arg Ile Lys Arg Gln His Ser Ser Gln Glu Gln Thr  
225 230 235 240

Phe Gln Leu Leu Lys Leu Trp Lys His Gln Asn Lys Asp Gln Asp Ile  
245 250 255

Val Lys Lys Ile Ile Gln Asp Ile Asp Leu Cys Glu Asn Ser Val Gln  
260 265 270

Arg His Ile Gly His Ala Asn Leu Thr Phe Glu Gln Leu Arg Ser Leu  
275 280 285

Met Glu Ser Leu Pro Gly Lys Lys Val Gly Ala Glu Asp Ile Glu Lys  
290 295 300

Thr Ile Lys Ala Cys Lys Pro Ser Asp Gln Ile Leu Lys Leu Leu Ser

305                      310                      315                      320

His Ala Leu Lys His Ser Lys Thr Tyr His Phe Pro Lys Thr Val Thr  
340 345 350

Lys Leu Tyr Gln Lys Leu Phe Leu Glu Met Ile Gly Asn Gln Val Gln  
370 375 380

```
<210> 107
<211> 20
<212> DNA
<213> Artificial Sequence
```

```
<220>
<221> misc_feature
<222> (12)..(12)
<223> n = unknown
```

20

<220>  
<223> Synthetic Sequence

```
<220>
<221> misc feature
```



<222> (16)..(16)  
<223> n = unknown

<400> 108  
yttrtactn gtraanswrt g

21